

AMENDMENTS TO THE CLAIMS:

The Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Canceled): ~~A method for treating breast cancer in a patient having a chemotherapy responsive breast cancer, comprising the steps of:~~

~~(a) administering to the patient in a first plurality of chemotherapy cycles a therapeutically effective and well tolerated amount of doxorubicin, said first plurality of chemotherapy cycles being administered in a dose dense protocol;~~

~~(b) after the completion of the first plurality of chemotherapy cycles, administering to the patient in a second plurality of chemotherapy cycles a therapeutically effective and well tolerated amount of a taxane chemotherapy agent, said second plurality of chemotherapy cycles being administered in a dose dense protocol; and~~

~~(c) after the completion of the second plurality of chemotherapy cycles, administering to the patient in a third plurality of chemotherapy cycles a therapeutically effective and well tolerated amount of cyclophosphamide, said third plurality of chemotherapy cycles being administered in a dose dense protocol.~~

Claim 2 (canceled): ~~The method of claim 1, wherein the dose dense interval between treatments in the chemotherapy cycles about 14 days.~~

Claim 3 (canceled): ~~The method of claim 2, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.~~

Claim 4 (canceled): ~~The method of claim 3, wherein the number of cycles in each plurality of chemotherapy cycles is 4.~~

Claim 5 (canceled): ~~The method of claim 4, wherein the doxorubicin is administered in an amount of 60 mg/m².~~

Claim 6 (canceled): ~~The method of claim 5, wherein the taxane is paclitaxel.~~

Claim 7 (canceled): ~~The method of claim 6, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 8 (canceled): ~~The method of claim 7, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 9 (canceled): ~~The method of claim 1, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.~~

Claim 10 (canceled): ~~The method of claim 9, wherein the number of cycles in each plurality of chemotherapy cycles is 4.~~

Claim 11 (canceled): ~~The method of claim 10, wherein the doxorubicin is administered in an amount of 60 mg/m².~~

Claim 12 (canceled): ~~The method of claim 11, wherein the taxane is paclitaxel.~~

Claim 13 (canceled): ~~The method of claim 12, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 14 (canceled): ~~The method of claim 13, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 15 (canceled): ~~The method of claim 1, wherein the doxorubicin is administered in an amount of 60mg/m².~~

Claim 16 (canceled): ~~The method of claim 15, wherein the taxane is paclitaxel.~~

Claim 17 (canceled): ~~The method of claim 16, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 18 (canceled): ~~The method of claim 17, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 19 (canceled): ~~The method of claim 1, wherein the taxane is paclitaxel.~~

Claim 20 (canceled): ~~The method of claim 19, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 21 (canceled): ~~The method of claim 20, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 22 (canceled): ~~The method of claim 1, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 23 (canceled): ~~The method of claim 1, further comprising the step of administering to the patient a therapeutically effective amount of granulocyte colony stimulating factor (G-CSF) during the intervals between treatments in one or more of the chemotherapy cycles.~~

Claim 24 (canceled): ~~The method of claim 23, wherein the G-CSF is administered in each interval between treatments in all of the chemotherapy cycles.~~

Claim 25 (canceled): ~~The method of claim 23, wherein the dose dense interval between treatments in the chemotherapy cycles about 14 days.~~

Claim 26 (canceled): ~~The method of claim 25, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.~~

Claim 27 (canceled): ~~The method of claim 26, wherein the number of cycles in each plurality of chemotherapy cycles is 4.~~

Claim 28 (canceled): ~~The method of claim 27, wherein the doxorubicin is administered in an amount of 60 mg/m².~~

Claim 29 (canceled): ~~The method of claim 28, wherein the taxane is paclitaxel.~~

Claim 30 (canceled): ~~The method of claim 29, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 31 (canceled): ~~The method of claim 30, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 32 (canceled): ~~The method of claim 23, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.~~

Claim 33 (canceled): ~~The method of claim 32, wherein the number of cycles in each plurality of chemotherapy cycles is 4.~~

Claim 34 (canceled): ~~The method of claim 33, wherein the doxorubicin is administered in an amount of 60 mg/m².~~

Claim 35 (canceled): ~~The method of claim 34, wherein the taxane is paclitaxel.~~

Claim 36 (canceled): ~~The method of claim 35, wherein the paclitaxel is administered in an amount of 175 mg/m².~~

Claim 37 (canceled): ~~The method of claim 36, wherein the cyclophosphamide is administered in an amount of 600 mg/m².~~

Claim 38 (canceled): ~~A method for providing improved chemotherapeutic efficacy in the treatment of a patient suffering from cancer, comprising the steps of:~~

(a) ~~administering to a cancer patient in need of chemotherapeutic treatment a first plurality of chemotherapy cycles of a therapeutically effective and well tolerated amount of a first chemotherapy agent, said first chemotherapy agent being effective against the cancer, and said first plurality chemotherapy cycles being administered in a dose dense protocol; and~~

(b) ~~after the completion of the first plurality of chemotherapy cycles, administering to the patient in a second plurality of chemotherapy cycles pf a therapeutically effective and well tolerated amount of a second chemotherapy agent~~

~~being effective against the cancer and said second chemo agent, different from the first chemotherapy agent, said being administered in a dose dense protocol, whereby the effectiveness of the first and second chemotherapy agents are enhanced as compared to treatment with the first and second chemotherapy agents in combination and in a non-dose dense protocol.~~

Claim 39 (canceled): ~~In a method for providing chemotherapeutic treatment to a patient suffering from cancer, said method comprising administering to the patient one or more types of chemotherapeutic agent effective against the cancer in a plurality of treatments, the improvement wherein the amount of each type of chemotherapeutic agent used is the optimal amount, and the treatments are given in a dose dense protocol.~~

Claim 40 (new): A method for treating breast cancer in a patient having a chemotherapy responsive breast cancer, comprising the steps of:

(a) administering to the patient in a first plurality of chemotherapy cycles a therapeutically-effective and well-tolerated amount of doxorubicin, said first plurality chemotherapy cycles being administered in a dose-dense protocol;

(b) after the completion of the first plurality of chemotherapy cycles, administering to the patient in a second plurality of chemotherapy cycles a therapeutically-effective and well-tolerated amount of a taxane chemotherapy agent, said second plurality of chemotherapy cycles being administered in a dose-dense protocol; and

(c) after the completion of the second plurality of chemotherapy cycles, administering to the patient in a third plurality of chemotherapy cycles a therapeutically-effective and well-tolerated amount of cyclophosphamide, said third plurality of chemotherapy cycles being administered in a dose-dense protocol.

Claim 41 (new): The method of claim 40, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 42 (new): The method of claim 41, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 43 (new): The method of claim 42, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 44 (new): The method of claim 41, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 45 (new): The method of claim 41, 42, 43 or 44 wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 46 (new): The method of claim 45, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 47 (new): The method of claim 46, wherein the doxorubicin is administered in an amount of 60 mg/m².

Claim 48 (new): The method of claim 47, wherein the taxane is paclitaxel.

Claim 49 (new): The method of claim 48, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 50 (new): The method of claim 49, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 51 (new): The method of claim 40, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 52 (new): The method of claim 51, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 53 (new): The method of claim 52, wherein the doxorubicin is administered in an amount of 60 mg/m².

Claim 54 (new): The method of claim 53, wherein the taxane is paclitaxel.

Claim 55 (new): The method of claim 54, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 56 (new): The method of claim 55, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 57 (new): The method of claim 40, wherein the doxorubicin is administered in an amount of 60mg/m².

Claim 58 (new): The method of claim 57 wherein the taxane is paclitaxel.

Claim 59 (new): The method of claim 58, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 60 (new): The method of claim 59, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 61 (new): The method of claim 40 wherein the taxane is paclitaxel.

Claim 62 (new): The method of claim 61, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 63 (new): The method of claim 62, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 64 (new): The method of claim 40, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 65 (new): The method of claim 40, further comprising the step of administering to the patient a therapeutically effective amount of granulocyte colony stimulating factor (G-CSF).

Claim 66 (new): The method of claim 65 wherein the G-CSF is administered between the chemotherapy cycles.

Claim 67 (new): The method of claim 65 wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 68 (new): The method of claim 67 wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 69 (new): The method of claim 68 wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 70 (new): The method of claim 67, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 71 (new): The method of claim 67, 68, 69 or 70, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 72 (new): The method of claim 71, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 73 (new): The method of claim 72, wherein the doxorubicin is administered in an amount of 60 mg/m².

Claim 74 (new): The method of claim 73, wherein the taxane is paclitaxel.

Claim 75 (new): The method of claim 74, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 76 (new): The method of claim 75, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 77 (new): The method of claim 65 wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 78 (new): The method of claim 77, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 79 (new): The method of claim 78, wherein the doxorubicin is administered in an amount of 60 mg/m².

Claim 80 (new): The method of claim 79, wherein the taxane is paclitaxel.

Claim 81 (new): The method of claim 80, wherein the paclitaxel is administered in an amount of 175 mg/m².

Claim 82 (new): The method of claim 81, wherein the cyclophosphamide is administered in an amount of 600 mg/m².

Claim 83 (new): A method for providing improved chemotherapeutic efficacy in the treatment of a patient suffering from cancer, comprising the steps of:

(a) administering to a cancer patient in need of chemotherapeutic treatment a first plurality of chemotherapy cycles of a therapeutically-effective and well-tolerated amount of a first chemotherapy agent, said first chemotherapy agent being effective against the cancer, and said first plurality chemotherapy cycles being administered in a dose-dense protocol; and

(b) after the completion of the first plurality of chemotherapy cycles, administering to the patient in a second plurality of chemotherapy cycles of a therapeutically-effective and well-tolerated amount of a second chemotherapy agent, different from the first chemotherapy agent, said second plurality of chemotherapy cycles being administered in a dose-dense protocol, whereby the effectiveness of the first and second chemotherapy agents are enhanced as compared to treatment with the first and second chemotherapy agents in combination and in a non-dose-dense protocol.

Claim 84 (new): The method of claim 83, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 85 (new): The method of claim 84, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 86 (new): The method of claim 85, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 87 (new): The method of claim 84, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 88 (new): The method of claim 84, 85, 86 or 87, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 89 (new): The method of claim 88, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 90 (new): The method of claim 83, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 91 (new): The method of claim 90, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 92 (new): The method of claim 83, further comprising the step of administering to the patient a therapeutically effective amount of granulocyte colony stimulating factor (G-CSF).

Claim 93 (new): The method of claim 92, wherein the G-CSF is administered between the chemotherapy cycles.

Claim 94 (new): The method of claim 92, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 95 (new): The method of claim 94, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 96 (new): The method of claim 95, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 97 (new): The method of claim 94, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 98 (new): The method of claim 94, 95, 96 or 97, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 99 (new): The method of claim 98, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 100 (new): The method of claim 92 wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 101 (new): The method of claim 100, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 102 (new): A method for providing chemotherapeutic treatment to a patient suffering from cancer, said method comprising administering to the patient one or more types of chemotherapeutic agent effective against the cancer in a plurality of chemotherapy cycles, the improvement wherein the amount of each type of chemotherapeutic agent used is the optimal amount, and the chemotherapy cycles are given in a dose-dense protocol

Claim 103 (new): The method of claim 102, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 104 (new): The method of claim 103, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 105 (new): The method of claim 104, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 106 (new): The method of claim 103, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 107 (new): The method of claim 103, 104, 105 or 106, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 108 (new): The method of claim 107, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 109 (new): The method of claim 102, further comprising the step of administering to the patient a therapeutically effective amount of granulocyte colony stimulating factor (G-CSF).

Claim 110 (new): The method of claim 109, wherein the G-CSF is administered between the chemotherapy cycles.

Claim 111 (new): The method of claim 109, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 112 (new): The method of claim 111, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 113 (new): The method of claim 112, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 114 (new): The method of claim 111, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.

Claim 115 (new): The method of claim 111, 112, 113 or 114, wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 116 (new): The method of claim 115, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 117 (new): The method of claim 102 wherein the number of cycles in each plurality of chemotherapy cycles is 3 or more.

Claim 118 (new): The method of claim 117, wherein the number of cycles in each plurality of chemotherapy cycles is 4.

Claim 119 (new): A method for treating breast cancer in a patient having a chemotherapy responsive breast cancer, comprising administering to the patient in a dose-dense protocol, therapeutically-effective and well-tolerated amounts of doxorubicin, a taxane and cyclophosphamide in a plurality of chemotherapy cycles, wherein the doxorubicin, taxane and cyclophosphamide are administered sequentially.

Claim 120 (new): The method of claim 119, wherein the doxorubicin is administered first, the taxane second and the cyclophosphamide third.

Claim 121 (new): The method of claim 119, wherein the doxorubicin is administered first, the cyclophosphamide second and the taxane third.

Claim 122 (new): The method of claim 119, wherein the taxane is administered first, the doxorubicin second and the cyclophosphamide third.

Claim 123 (new): The method of claim 119, wherein the taxane is administered first, the cyclophosphamide second and the doxorubicin third.

Claim 124 (new): The method of claim 119, wherein the cyclophosphamide is administered first, the taxane second and the doxorubicin third.

Claim 125 (new): The method of claim 119, wherein the cyclophosphamide is administered first, the doxorubicin second and the taxane third.

Claim 126 (new): The method of claim 120, 121, 122, 123, 124 or 125, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 21 days.

Claim 127 (new): The method of claim 120, 121, 122, 123, 124 or 125, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of between 12 and 16 days.

Claim 128 (new): The method of claim 120, 121, 122, 123, 124 or 125, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of about 14 days.

Claim 129 (new): The method of claim 120, 121, 122, 123, 124 or 125, wherein the dose-dense protocol specifies an interval of time between any two consecutive chemotherapy cycles of less than 12 days.